

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/986,686
Attorney Docket No.: Q67160

REMARKS

Claims 1-10 have been examined. Claims 1, 5, 6 and 10 have been rejected under 35 U.S.C. § 102(b) and 35 U.S.C. § 102(e) and claims 2, 3, 7 and 8 have been rejected under 35 U.S.C. § 103(a). The Examiner has indicated that claims 4 and 9 contain allowable subject matter.

I. Preliminary matters

A. Objection to the drawings

The Examiner objected to the drawings. The Examiner objected to Fig. 1 because it illustrates only that which is old and does not include the legend "Prior Art." Applicants have amended Fig. 1 to include the legend "Prior Art" and a replacement sheet is submitted herewith. The Examiner also objected to the drawings for failing to comply with 37 CFR 1.84(p)(5). Specifically, Examiner states that the drawings lack the reference character 10. Applicants have amended Fig. 2 to include the reference character 10 and a replacement sheet is submitted herewith. The Examiner objected to Fig. 3 because of minor informalities. The Applicant has already corrected the errors in Fig. 3 in the formal drawings. No new matter has been added.

B. Objection to the claims

The Examiner objected to claims 1, 5, 6 and 10 for informalities. The Examiner states that the phrase "an stored" in each of these claims should read "a stored." Applicants have amended the claims in accordance with the Examiner's suggestion. These amendments clearly do not change the scope of the claims.

C. Objection to the title

The Examiner objected to the title of the invention as not descriptive. Applicant's have changed the title to "Recording Apparatus with Light Power Control for use with Optical Recording Medium and Method Thereof."

II. Rejection under 35 U.S.C. § 102(b)

The Examiner rejected claims 1, 5, 6 and 10 under 35 U.S.C. § 102(b) as being allegedly anticipated by US Patent 5,233,596 Tani (hereinafter Tani). Applicants respectfully traverse this rejection because Tani fails to disclose each and every element of Applicants' claims.

For example, Tani fails to disclose a detection value storing portion which stores "a driving current adjustment value from said light power control portion and a temperature detection value from said temperature detecting portion in an associated manner" as recited in claims 1 and 5, or a detection value storing step of "storing a driving current adjustment value in said light power control step in association with a temperature detection value obtained in said temperature detecting step" as recited in claims 6 and 10. (emphasis added)

In claims 1 and 5 of the present invention, the detection value storing portion stores actual drive current data from the light power control portion and actual temperature data from the temperature detecting portion. The detection value storing portion stores values for the driving current adjustment and the temperature while the recording apparatus is writing to the recording medium. This actual data can be used later in the recording process of the same recording medium from which it was obtained. The detection value storing step of claims 6 and

10 operates similarly. During the detection value storing step, drive current values from the light power control step and temperature values from the temperature detecting step are stored.

With respect to claims 1 and 5, the Tani data storage unit (7b) does not disclose storing driving current and temperature value data from light power control and temperature detecting portions. With respect to claims 6 and 10, the Tani data storage unit does not obtain driving current data and temperature data from a driving current step and a temperature storing step. Rather, the Tani data storage unit (7b) “stores in advance the data on the relationship between the drive current and semiconductor laser temperature, as shown in FIG. 2.” In a reproducing stage, Tani uses the information that was stored in advance to determine the temperature variance of the laser. The temperature is determined by “referring to the data stored in the data storage unit 7b.” (Tani column 3, lines 48-49). The drive current and light power are inserted into the predetermined chart to obtain a temperature value. The Tani storage unit relies on data stored in advance rather than data stored during the operation of the laser.

In the recording stage, Tani again uses data that was stored in advance rather than actual recording stage data. No recording stage data has been stored. Instead, Tani determines a drive current value by taking the temperature and light output at the time right before the recording phase begins. Tani inputs this data into the pre-stored charts and determines a drive current value as determined by the chart of Fig. 2. (Tani column 4, lines 1-27) The drive current information must be stored in advance because the device has not previously been driven in the recording stage and so no recording stage data could possibly have been recorded. The data

storage unit is not relying on drive current data that it has collected from other portions of the apparatus nor is it relying on drive current data collected from another step.

The present invention is able to utilize data from the recording stage of the actual recording medium. That is, when the present invention begins to record on a recording medium it begins to gather data. It can use this data to aid in later stages of writing to the exact same recording medium. In contrast, Tani must rely on data stored in advance. Accordingly, the present invention better adjusts to variations of the particular recording medium that is being written to than does Tani. Since the Tani data storage unit relies on information stored in advance, it fails to meet the detection value storing portion of claims 1 and 5 or the detection value storing step of claims 6 and 10. Therefore, Tani fails to disclose each and every element of claims 1, 5, 6 and 10.

III. Rejection under 35 U.S.C. § 102(e)

The Examiner also rejected claims 1, 5, 6 and 10 under 35 U.S.C. § 102(e) as being allegedly anticipated by US Patent 6,671,248 to Miyabata et al. (hereinafter Miyabata). The priority date of the present application (i.e. November 10, 2000) is earlier than the effective U.S. filing date of Miyabata (i.e. May 18, 2001). Therefore, Applicants are submitting herewith a certified English translation of the priority document of the present application (i.e. Japanese Patent Application No. 2000-344148) to perfect the claim to priority and eliminate Miyabata as a prior art reference. Since Miyabata is no longer prior art, the rejection of claims 1, 5, 6 and 10 should be withdrawn.

IV. Rejection under 35 U.S.C. § 103(a)

The Examiner rejected claims 2 and 7 under 35 U.S.C. § 103(a) as being allegedly anticipated by Tani or Miyabata and further in view of US Patent No. 5,742,566 to Imai (hereinafter Imai). The Examiner rejected claims 3 and 8 under 35 U.S.C. § 103(a) as being allegedly anticipated by Tani or Miyabata and further in view of Japanese Patent No. 44320384 to Tanahashi (hereinafter Tanahashi). Applicants respectfully traverse these rejections because the combinations cited by the Examiner fail to disclose or suggest the present invention.

As stated above, Applicants are submitting a certified English translation of the priority document. Accordingly, Miyabata is no longer prior art. Further, as Applicants have argued above, Tani fails to disclose or suggest all of the recitations of the current invention. Neither Imai nor Tanahashi suggest or disclose anything to correct the deficiencies of Tani.

Therefore, Applicant submits that claims 2, 3, 7 and 8 are in condition for allowance and such action is respectfully requested.

V. Allowable subject matter

Applicants respectfully thank the Examiner for indicating that claims 4 and 9 contain allowable subject matter if rewritten in the independent form including all the limitations of the base claim. However, since the rejection of the corresponding base claims are believed to be overcome, Applicants have not placed these claims in independent form at this time.

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VI. Conclusion

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

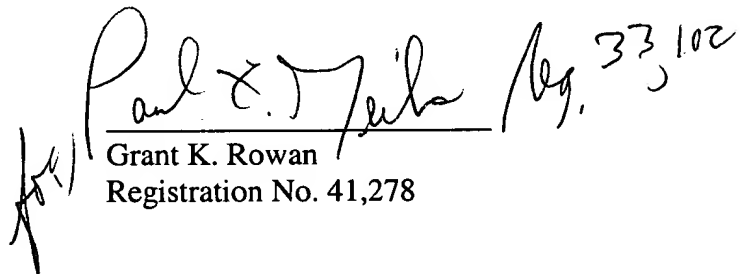
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